DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

11/3/2010 has been entered.

EXAMINER'S AMENDMENT

2.   An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

        Authorization for this examiner's amendment was given in a telephone interview

with Mandy Jubang on November 15th.

        Amend the application as follows:

3.   As per independent claim 1, lines 2-7, delete "receiving input from a user

identifying at least two portions of a first set of audio signals as being of interest to the

user, wherein the input includes a first input from the user identifying a first instance of

an entire spoken event of interest in the first set of audio signals and a second input

from the user identifying a second instance of the entire spoken event of interest in the

first set of audio signals;"

and insert -receiving input from a user identifying at least a first portion and a

second portion of a first set of audio signals as being of interest to the user, wherein the

first portion corresponds to a first instance of an entire spoken event of interest in the

first set of audio signals and the second portion corresponds to a second instance of the

entire spoken event of interest in the first set of audio signals;-

4.   As per independent claim 1, line 23, delete "interest."

        and insert –interest,

        wherein the first instance of the entire spoken event of interest and the second

instance of the entire spoken event of interest include a common set of words, and

        wherein the subword unit representation corresponding to the first portion and

the subword unit representation corresponding to the second portion are different.-

5.   As per independent claim 17, lines 3-8, delete "receive input from a user

identifying at least two portions of a first set of audio signals as being of interest to the

user, wherein the input includes a first input from the user identifying a first instance of

an entire spoken event of interest in the first set of audio signals and a second input

from the user identifying a second instance of the entire spoken event of interest in the

first set of audio signals;"

and insert -receive input from a user identifying at least a first portion and a

second portion of a first set of audio signals as being of interest to the user, wherein the

first portion corresponds to a first instance of an entire spoken event of interest in the

first set of audio signals and the second portion corresponds to a second instance of the

entire spoken event of interest in the first set of audio signals;-

6.   As per independent claim 1, line 23, delete "interest."

        and insert –interest,

        wherein the first instance of the entire spoken event of interest and the second

instance of the entire spoken event of interest include a common set of words, and

        wherein the subword unit representation corresponding to the first portion and

the subword unit representation corresponding to the second portion are different.-

7.   As per independent claim 18, lines 3-8, delete "receiving input from a user

identifying at least two portions of a first set of audio signals as being of interest to the

user, wherein the input includes a first input from the user identifying a first instance of

an entire spoken event of interest in the first set of audio signals and a second input

from the user identifying a second instance of the entire spoken event of interest in the

first set of audio signals;"

        and insert -receiving input from a user identifying at least a first portion and a

second portion of a first set of audio signals as being of interest to the user, wherein the

first portion corresponds to a first instance of an entire spoken event of interest in the

first set of audio signals and the second portion corresponds to a second instance of the

entire spoken event of interest in the first set of audio signals;-

8.   As per independent claim 18, line 19, delete "interest."

        and insert –interest,

        wherein the first instance of the entire spoken event of interest and the second

instance of the entire spoken event of interest include a common set of words, and

        wherein the subword unit representation corresponding to the first portion and

the subword unit representation corresponding to the second portion are different.-

9.   Cancel claim 20.

                            Reasons for Allowance

10.   The following is an examiner's statement of reasons for allowance:

As per independent claim 1, the closest known prior art fails to teach or fairly suggest,

alone or in reasonable combination, the limitations:

        receiving input from a user identifying at least a first portion and a second portion

of a first set of audio signals as being of interest to the user, wherein the first portion

corresponds to a first instance of an entire spoken event of interest in the first set of

audio signals and the second portion corresponds to a second instance of the entire

spoken event of interest in the first set of audio signals;

forming, by the query recognizer of the word spotting system, a representation of the entire spoken event of interest, wherein the forming includes combining the subword unit representations of the respective identified portions of the first set of audio signals;

wherein the first instance of the entire spoken event of interest and the second instance of the entire spoken event of interest include a common set of words, and

wherein the subword unit representation corresponding to the first portion and the subword unit representation corresponding to the second portion are different.

Cardillo provides a phonetic keyword spotting system for locating queries using phonemes (Fig. 1, Page 11, column 2). Cardillo further teaches multiword queries (Page 12, column 1) which each have their own respective phonetic (subword unit) representation. However, Cardillo fails to teach wherein the first instance of the entire spoken event of interest and the second instance of the entire spoken event of interest include a common set of words, and wherein the subword unit representation corresponding to the first portion and the subword unit representation corresponding to the second portion are different.

Wolf teaches a wordspotting engine for searching queries developed as phoneme lattices from spoken queries (¶ 0054). Wolf acknowledges that since phonemes are used, it is possible to handle words that sound the same but have different meaning (¶ 0022). However, Wolf fails to teach receiving a first portion and a second portion each corresponding to a respective instance of an entire spoken event of interest, forming a representation of the entire spoken event of interest by combining

the subword unit representations of the respective identified portions of the first set of audio signals; wherein the first instance of the entire spoken event of interest and the second instance of the entire spoken event of interest include a common set of words, and wherein the subword unit representation corresponding to the first portion and the subword unit representation corresponding to the second portion are different.

Claims 2-16 depend on, and further limit, independent claim 1. Therefore, they are considered allowable for the same reasons.

As per independent claim 17, the closest known prior art fails to teach or fairly suggest, alone or in reasonable combination, the limitations:

receive input from a user identifying at least a first portion and a second portion of a first set of audio signals as being of interest to the user, wherein the first portion corresponds to a first instance of an entire spoken event of interest in the first set of audio signals and the second portion corresponds to a second instance of the entire spoken event of interest in the first set of audio signals;

form, by the query recognizer of the word spotting system, a representation of the entire spoken event of interest, wherein the forming includes combining the subword unit representations of the respective identified portions of the first set of audio signals;

wherein the first instance of the entire spoken event of interest and the second instance of the entire spoken event of interest include a common set of words, and

wherein the subword unit representation corresponding to the first portion and the subword unit representation corresponding to the second portion are different.

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As per independent claim 18, the closest known prior art fails to teach or fairly suggest, alone or in reasonable combination, the limitations:

receiving input from a user identifying at least a first portion and a second portion of a first set of audio signals as being of interest to the user, wherein the first portion corresponds to a first instance of an entire spoken event of interest in the first set of audio signals and the second portion corresponds to a second instance of the entire spoken event of interest in the first set of audio signals;

forming, by the query recognizer of the word spotting system, a representation of the entire spoken event of interest, wherein the forming includes combining the subword unit representations of the respective identified portions of the first set of audio signals;

wherein the first instance of the entire spoken event of interest and the second instance of the entire spoken event of interest include a common set of words, and

wherein the subword unit representation corresponding to the first portion and the subword unit representation corresponding to the second portion are different.

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corresponding to the first portion and the subword unit representation corresponding to the second portion are different.

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Claim 19 depends on, and further limits, independent claim 18. Therefore, it is considered allowable for the same reasons.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

11.   Any inquiry concerning this communication or earlier communications from the
examiner should be directed to GREG A. BORSETTI whose telephone number is (571)
270-3885. The examiner can normally be reached on Monday - Friday (8am - 5pm
Eastern Time).

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, RICHEMOND DORVIL can be reached on 571-272-7602. The fax phone
number for the organization where this application or proceeding is assigned is 571-
273-8300.

        Information regarding the status of an application may be obtained from the
Patent Application Information Retrieval (PAIR) system. Status information for
published applications may be obtained from either Private PAIR or Public PAIR.
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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should
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USPTO Customer Service Representative or access to the automated information
system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Greg A. Borsetti/
Examiner, Art Unit 2626

/Richemond Dorvil/
Supervisory Patent Examiner, Art Unit 2626